SUGGESTIONS FOR THE CALFED BAY-DELTA PROGRAM

Westside Resource Conservation District May 1998

These suggestions are based upon our review of the following documents: (a) Programmatic EIS/EIR -- Executive Summary, (b) Phase II -- Interim report, (c) Programmatic EIS/EIR -- Draft, (d) Water Use Efficiency Component, and (e) Water Quality Program. We have also discussed the CALFED program with many people, and attended the hearing in Fresno on April 22, 1998. Our suggestions are also based upon many years of working on the integrated management of agricultural water, salt, selenium, and other natural resources. We have been continually searching for unity between technical, economic, and ecological issues. Our environmental consciousness is expressed in a practical way through our work and life.

There is a wealth of data and concepts presented in the CALFED documents. Our suggestions will address only several basic issues.

Drainage water, salt and selenium are resources

The results of field work in the United States, Australia, Israel, and other countries clearly indicate that saline water has an important economic value as a source of irrigation water for salt-tolerant crops. Demonstrations of this technology in California confirm that 80 to 85 percent of drainage water can be used to produce salt-tolerant crops, plants, and trees.

There is a practical opportunity to produce crystallized salts and distilled water from the remaining 15 to 20 percent of drainage water using solar energy. This technology has been used in many countries, and it was extensively researched and tested by the U.S. Department of Interior's Office of Saline Water, some 20 to 30 years ago. Demonstration of a solar process for distilling highly saline water on a farm in Fresno County is planned for implementation later this year. Please see an attached chart describing the integrated management of agricultural water and salt.

The main form of salt in the San Joaquin Valley drainage water is sodium sulfate. Other salts, such as calcium sulfate and sodium chloride, represent a relatively smaller portion of the total salts volume. Presently, an annual market for sodium sulfate in the United States is over 1.5 million tons per year. About 52 percent of the sodium sulfate we use is imported. It would seem that opportunities to capture some share of the existing market, as well as to develop new uses for sodium sulfate, should be investigated. The Salt Utilization Committee of the San Joaquin Valley Drainage Implementation Program is presently exploring these opportunities.

Salt-tolerant crops irrigated with drainage water have shown to accumulate selenium in their tissues. Feeding trials conducted with these selenium enriched forage crops have been successful. It is feasible to produce selenium-enriched forage on farms with drainage problems and market it as livestock and wildlife feed in selenium deficient regions.

Establishing policies to encourage management of drainage water, salt, and selenium as resources, rather than as toxic wastes, would be an effective way to enhance the environmental quality of the Bay-Delta ecosystem.

Carbohydrate Economy

Our society is transitioning from a hydrocarbon economy (fossil fuel source) to a carbohydrate economy (bio-based source). This transition will dramatically increase the importance of California's basic resources: soil and water. An economy based on bio-resources will require the enhanced availability of land and water resources to produce not only food but also fuels, fiber, chemicals and other industrial materials. To prepare for this future, the European Union has developed a white paper that envisages growing energy crops on millions of hectares of farmland. A copy of the DOE report "Plant/crop-based Renewable Resources 2020" is attached. Other reports on this subject can also be recommended on request.

Planning for the next century, the CALFED program should envision a state economy that goes beyond traditional farm commodities and food processing industries. A rural economy will be expanded to include bio-industries; that will also require increased water supplies. The CALFED program needs to consider allocations of water for these future resource developments in its planning process.

Unity of Ecosystems

Studying the CALFED documents, it seems that the planning is based on the needs of two separate and competing ecosystems: one for wildlife and one for people. Sustainable environmental quality requires a close interaction of people and wildlife in one ecosystem. Two separate and competing ecosystems will not be sustainable. There are many examples in California of ecological harmony between modern agriculture and wildlife habitats. It is safe to assume that presently advanced farming methods will be common ways of producing food and bio-commodities in the next century. Examples of ecological unity are described in Farming for Wildlife (1996), monthly issues of California Farmer, and other publications.

Compliance with CEQA

Many elements in CALFED - Ecosystem Restoration Program, Water Quality Program, Levee Integrity Program, all have an agricultural land conversion or retirement element to them. But, none of these programs have been evaluated in the draft for alternative strategies to achieve CALFED goals that would not impact agricultural land. They should and need to be evaluated, to comply with CEQA, and to make for a better program. As the CALFED program stands now, it appears that agricultural land is viewed to be more valuable as habitat and a source of water than for the production of food and bio-resources. While farmland is acknowledged in the IES/EIR as part of the existing environment, alternative strategies to the Ecosystem Restoration Program, Water Quality Program, and Levee Integrity Program are not evaluated. Such alternatives should seek to avoid, reduce or mitigate impacts to agricultural resources, or actually enhance farming as a valuable part of our environment for the benefit of people and wildlife.

In compliance with CEQA requirements, we request that CALFED address openly and honestly in the EIR/EIS the following issues:

- 1. Can two separate and competing ecosystems, one for wildlife and one for people, be viable and sustainable?
- 2. Are separate ecosystems compatible with the basic environmental principles?
- 3. What are the economic and environmental advantages of one ecosystem?
- 4. How can CALFED's environmental goals be met while preserving, protecting, and enhancing agricultural land and water resources?
- 5. How can CALFED best coordinate, facilitate and otherwise support Resource Conservation Districts and other local entities in their efforts to develop and implement programs that enhance the environment and rural economies?
- 6. Can farmland and water be taken out of production, and the future of our society still be based on bio-resources; are environmental policies consistent in this respect?
- 7. What would be the socio-economic effect of taking farmland and water out of production on citizens working in rural communities, and people living in California, the United States, and other countries?
- 8. What would be the effect of managing drainage water, salt, and selenium as economic resources on the environmental quality of the Bay-Delta ecosystem?
- 9. Can our present water system, operating even at the highest efficiency levels, serve California's needs in the next century without significant surface water storage enhancements?

We strongly believe that the CALFED program must address these important issues before the EIS/EIR can be certified to comply with CEQA and before the program can be responsibly implemented.

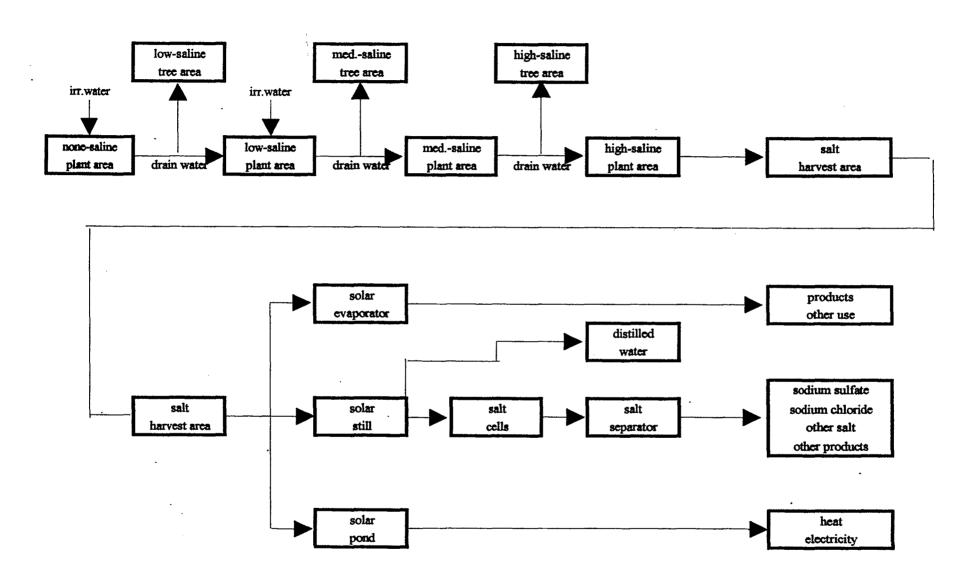
Conclusion

Realistic solutions for enhanced water supplies need to be developed to accommodate the future efficient use of water by all stakeholders. This is specially critical if we are to maintain our ability to produce food and bio-resources, enhance our environment, and supply water to over 40 million people who will live in California by 2030. The CALFED program may develop an excellent approach for achieving an economically and environmentally viable and sustainable future. Our suggestions for the CALFED program are to acknowledge the limits of past technology and resource philosophy and to incorporate today's knowledge as well as recognized trends in developing realistic plans compatible with our future resource and environmental needs.

We recognize the critical need to solve the Delta problems, see no viable alternative to the CALFED process, recognize the substantial progress that CALFED has made, offer our continued support, and hope that an acceptable solution is at hand.

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INTEGRATED MANAGEMENT OF WATER, SALT, AND SELENIUM ON FARMS











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